

WELDING, BURNING AND BRAZING

INTRODUCTION

Work done on site that involves welding-burning-brazing is regulated through the use of a Burn Permit. This system allows for the ready checking of risk evaluation, required controls, and approval by authorized persons. This chapter describes procedures for permitting welding-burning-brazing operations by Fermilab personnel as well as for all subcontracted work.

SPECIAL RESPONSIBILITIES

Members of the Fermilab Fire Department issue permits and provide fire safety instruction in welding-burning-brazing.

The project leader (i.e., person initiating the job) or the Task Manager/Construction Coordinator (for subcontracted activities) is responsible for obtaining a Burn Permit for any welding-burning-brazing activity. The Burn Permit requires specification of precautions, assurance of adequate training, and provisions for sufficient supervision to assure safe work practices.

PROCEDURES

1. Welding-Burning-Brazing
 - a. Persons planning to conduct a welding-burning-brazing operation shall contact the Fire Department. Members of the Fermilab Fire Department will examine the proposed operation, prescribe precautions, review safety procedures with the employee, and then issue a written Burn Permit.
 - b. Additional safety review and approval may be required by the appropriate division/section senior safety officer if work involves radioactive materials or if work will be conducted in a confined space or other hazardous operations area. In particular, prior written approval of the division/section safety officer shall be obtained for work within 25 feet of any flammable liquid or gas hazard.

- c. Continuous permits may be issued for areas that contain frequent or continuous welding-burning-brazing operations. The Fire Department inspects continuous welding areas monthly and has the authority to revoke permits in non-complying areas.
- d. When it is likely that a fire detection system will be set off by a welding-burning-brazing operation, the system may be temporarily shielded (preferred) or disabled.

The Fire Department and local supervision shall be notified whenever a smoke detector is temporarily shielded. Removal of the shield at the end of each workday shall be verified by the individual who shielded the detector.

When shielding is impractical, disablement shall be requested according to the procedures described in Chapter 6030.

Usage of key switches for disabling detection systems by the designated key holder shall be preceded by calling Security, Ext. 3414 and the Fire Department, Ext. 3428. Enabling the key switch shall be completed at the end of the normal workday, and again Security and the Fire Department shall be notified, or the designated key holder will be called in to restore the system to the normal condition.

- 2. There are two technical supplements to this chapter: Fermilab Fire Department procedure FD-RO-202 (available from the Shift Duty Captain) and American National Standard (ANSI) Z-49.1 Safety in Welding and Cutting, which identifies safety precautions, including personal protective equipment.